

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001864**Date Inspected:** 25-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Sahnghai, China**CWI Name:** Wu Ming Kat and Lig Ang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)& Tower Diap**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Roscoe Dixon was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

OBG outside storage area:

The Caltrans QA Inspector performed visual inspection on the completed submerged arc welding,(SAW) cover pass welds and partial joint penetration (PJP) welds joining the closed rib to deck panel DP432-001, u-rib U-74, welds 1 and 2; u-rib U-72, welds 3&4, and welds U-73 welds 5&6.

Bay 1 OBG:

The Caltrans QA Inspector performed visual inspection on the completed submerged arc welding,(SAW) cover pass welds and partial joint penetration (PJP) welds joining the closed rib to deck panel DP055-001, u-rib U-151, weld# 1 and 2; u-rib U-152, welds 3&4, u-rib U-85 welds 5&6, u-rib U-79, welds 7&8 and U-100, welds 9&10.

The Caltrans QA Inspectors measured the weld indications which appeared to have the following deficiencies: welding overlap, oversize welds, under-fill, and incomplete fusion. These indications observed at the welds were marked in yellow by the QA Inspector with a paint stick along the distance from the "Y" axis, starting at the weld start to the weld completion end.

The weld indications observed were recorded on a Caltrans spreadsheet for future reference.

WELDING INSPECTION REPORT

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Bay 3 OBG:

The QA Inspector randomly observed ZPMC Welder Zhang Feng ID Number 049769 utilizing the Shielded Metal Arc Welding (SMAW) Process with ZPMC Weld Procedure Specification (WPS) WPS-B-P-2112 in the 2G (Horizontal) position to tack welds various "T" stiffeners to plate material to fabricate Floor Beams to BP 110-001-016, BP 110-001-018, and BP 160-001-017. The QA Inspector randomly observed ZPMC CWI Wu ming Kat monitoring weld parameters.

The QA Inspector also randomly observed welding parameters and they are as follows: 174 amps, 22.7 volts the weld parameters appeared to comply with contract requirements. .

The QA Inspector also randomly observed ZPMC Welders Gu Deing Yun ID Number 03799 and Li Wen Guo utilizing the Shielded Metal Arc Welding (SMAW) Process with ZPMC Weld Procedure Specification (WPS) WPS-B-P-2112 in the 2G (Horizontal) position to tack weld various "T" stiffeners to plate material during the fabrication of Floor Beams BP 137- 001-013 and BP 137-001-014. The beams were being tack welded by welder ID # 037997, and BP 164-001-015 and BP 164-001-016 were being tack welded by welder ID #066261.

The QA Inspector randomly observed ZPMC CWI Wu ming Kat monitoring weld parameters. The QA Inspector also randomly observed welding parameters and the weld parameters appeared to comply with contract requirements.

Summary of Conversations:

As noted within the report shown above

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Dixon,Roscoe	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
